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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/595,265	04/03/2006	Nicolas Droger	ESSR112US	6405

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AUSTIN, TX 78701

EXAMINER
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NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
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1714

MAIL DATE	DELIVERY MODE
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05/29/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,265	<b>Applicant(s)</b> DROGER ET AL.	
	<b>Examiner</b> Patrick D. Niland	<b>Art Unit</b> 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 39-82 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 76-81 is/are allowed.
- 6) ☒ Claim(s) 39,47-51 and 62-75 is/are rejected.
- 7) ☒ Claim(s) 40-46,52-61 and 82 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/31/06</u> . | 6) <input type="checkbox"/> Other: ____  |

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1. Claim 51 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the disclosed “derivatives” of claim 51, does not reasonably provide enablement for all of the encompassed “derivatives”. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

Chemistry is an unpredictable art. The instant specification gives little guidance on how to make all of the encompassed derivatives, which is theoretically an infinite list and how to choose those derivatives that will function in the instant claims. These determinations would require infinite experimentation by the skilled artisan given the lack of teaching in the instant specification relative to the scope of “derivative” which is undue.

2. Claims 52-61 are objected to as depending from the above rejected claim 51.

3. Claims 48 and 62-72 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. Claims 48 and 62-72 depend from claim 39 and recite “the polythiourethane matrix”. There is not antecedent basis for “the polythiourethane matrix”. It is therefore unclear if these claims require a polythiourethane matrix or not.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 39, 47-51, and 62-75 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 4686250 Qureshi.

Qureshi discloses antiplasticized thermosets which may contain S in the matrices. See the abstract; column 2, lines 54-68, particularly X of the formula; column 3, line 1 showing that X can be S; column 8, lines 66-68 particularly antiplasticizers and their effect; column 9, lines 1-10. Claims 48, 62-72 are interpreted as not requiring a polythiourethane matrix. Since the antiplasticizers disclosed by the patentee appear to fall within the scope of those of the instant claims, they are expected to necessarily and inherently possess the instantly claimed properties of claims 47-50, 73-775. Dibutylphthalate is a carbonyl derivative of claim 51. The amounts of column 9, lines 29-33 fall within the scope of the instant claims 62-72, interpreted as not requiring polythiourethanes.

7. Claims 39, 47-51, and 62-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 4686250 Qureshi.

Qureshi discloses antiplasticized thermosets which may contain S in the matrices. See the abstract; column 2, lines 54-68, particularly X of the formula; column 3, line 1 showing that X can be S; column 8, lines 66-68 particularly antiplasticizers and their effect; column 9, lines 1-10. Claims 48, 62-72 are interpreted as not requiring a polythiourethane matrix. Since the

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antiplasticizers disclosed by the patentee appear to fall within the scope of those of the instant claims, they are expected to necessarily and inherently possess the instantly claimed properties of claims 47-50, 73-775. Dibutylphthalate is a carbonyl derivative of claim 51. The amounts of column 9, lines 29-33 fall within the scope of the instant claims 62-72, interpreted as not requiring polythiourethanes.

It would have been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the S in the thermosets of the patentee and antiplasticizers to obtain the benefits of each of these ingredients known to the ordinary skilled artisan in the final composition of the patentee.

8. Claims 40-46, 52-61, and 82 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The inventions of these claims are not disclosed in the prior art considered and the prior art considered does not provide motivation to modify their teachings into the instantly claimed inventions.

9. Claims 76-81 are allowable over the prior art considered.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick D. Niland  
Primary Examiner  
Art Unit 1714